

REMARKS

Claims 5-6 and 15-16 are pending. By this Amendment, claims 1-4, 7-14 and 17-20 are canceled. No new matter is added. Applicant respectfully requests reconsideration of claims 5-6 and 15-16.

Entry of this Amendment is proper under 37 C.F.R. § 1.116 since this Amendment: (a) places the application in condition for allowance for reasons discussed herein; (b) does not raise any new issue regarding further search and/or consideration since the Amendment amplifies issues previously discussed throughout prosecution; (c) does not present any additional claims without canceling a corresponding number of finally-rejected claims and (d) places the application in better form for appeal, should an appeal be necessary. The Amendment is necessary because it is made in reply to the Examiner's statement that "[a] complete reply to the final rejection must include cancellation of nonelected claims" (Office Action, page 2, lines 2-3). Entry of the Amendment is thus respectfully requested.

Withdrawn Claims 1-4, 7-14 and 17-20 were objected to as being drawn to a non-elected invention. As suggested by the Examiner, Applicants have canceled claims 1-4, 7-14 and 17-20. Thus, Applicants respectfully request withdrawal of this objection.

Claims 5-6 and 15-16 were rejected under 35 U.S.C. § 112, first and second paragraphs, for asserted failing to comply with the written description requirement and for asserted indefiniteness. These rejections are respectfully traversed.

Applicants respectfully submit that two forms of equation 2 in claim 5 were not intended. In contrast, the horizontal line below $-R^3$ in equation 2 of claim 5 in the Supplemental Amendment filed July 2, 2004 was intended to indicate that the

underlined form of equation 2 was to replace the former equation 2 with the strikethrough (the horizontal line above R3).

As such, Applicants respectfully request reconsideration and withdrawal of the rejections of claims 5-6 and 15-16 under 35 U.S.C. § 112, first and second paragraphs.

Claims 5-6 and 15-16 were also rejected under 35 U.S.C. § 103(a) as obvious over Ahluwalia (U.S. Patent No. 5,032,224) in view of WO 97/06304 (with Maeda et al, U.S. Patent No. 6,248,209 relied upon as the English equivalent of WO 97/06304) and Holton (U.S. Patent No. 4,012,280). This rejection is traversed.

Applicants note that the term “anionic” in the last paragraph of page 2 of the September 28, 2004 Office Action should properly state “nonionic.”

Regardless, Applicants respectfully submit that Ahluwalia does not teach or suggest the use of anionic surfactant (C), (D) or (E) (see, e.g. claim 5). The anionic surfactants of Ahluwalia (see, e.g. Ahluwalia, columns 3-4) are not the same as anionic surfactant (C) of the presently claimed invention. For example, Applicants note that anionic surfactant (C) of claim 5 has the general formula (5) of $R^6-SO_3M^1$, where R^6 is a straight-chain, branched or cyclic aliphatic hydrocarbyl group containing 4-24 atoms and M^1 is a monovalent cation (claim 5). Further, anionic surfactant (C) of the presently claimed invention may be distinguished from the anionic surfactants disclosed by Ahluwalia as follows:

- (1) Ahluwalia's alpha-sulfo alkyl esters, which include moieties of formula (I) (Ahluwalia, column 3, lines 50-66), differ from anionic surfactant (C) recited in claim 5 in that they do not have a “-C(=O)-OR' group”.

(2) Ahluwalia's alkaryl sulfonates, which include moieties of formula (II) (Ahluwalia, column 3, line 67 to column 4, line 17), are aromatic compounds. In contrast, anionic surfactant (C) recited in claim 5 is an aliphatic compound, not an aromatic compound.

(3) Ahluwalia's alkyl sulfates, which include moieties of formula (III) (Ahluwalia, column 4, lines 18-27) are literally sulfates. In contrast, anionic surfactant (C) recited in claim 5 is not a sulfate, but a sulfonate. In other words, anionic surfactant (C) of the presently claimed invention can be distinguished from the alkyl sulfates of Ahluwalia in that anionic surfactant (C) does not have an -O- group.

In view of the above distinctions between Ahluwalia's anionic surfactants and the anionic surfactant (C) of claim 5 or the elected species, Applicants respectfully submit that the anionic surfactants disclosed by Ahluwalia are distinguished from anionic surfactant (C) of claims 5-6 and 15-16 and the elected species, e.g., n-tetradecyl-SO₃Na.

Applicants respectfully submit that Maeda et al. and Holton do not satisfy the deficiencies of Ahluwalia, as Maeda et al. and Holton do not teach or suggest anionic surfactants (C), (D) or (E) of formula (5), (6) or (7) of the presently claimed invention (see claim 5), much less in a digestive assistant for the alkaline slurry of cellulose pulp. Thus, Maeda et al. and Holton do not cure the deficiencies of Ahluwalia.

Further, Applicants respectfully submit that the purpose of the disclosure of Maeda et al. may be distinguished from that of the presently claimed invention. Maeda et al. discloses “a method of bleaching cellulose pulp” which may use “compound (U) represented by general formula (1)” of “ $R^1-O-[(C_2H_4)_m/(AO)_n]-H$ (1)” (Maeda et al., column 1, line 66 to column 2 line 7) (emphasis added). As such, compound (U) of Maeda et al. is a “bleaching assistant” (Maeda et al., Abstract and claim 1). In contrast, the presently claimed invention relates to a “digestion assistant” (See, e.g., page 1, lines 6-8 of the Specification). Further, although general formula (1) may be generic to nonionic surfactant isodecyl-O-(PO)₁-(EO)₁₀-H, Applicants respectfully submit that Maeda et al. does not teach or suggest the specific use of isodecyl-O-(PO)₁-(EO)₁₀-H in particular. In view of these differences, Applicants respectfully submit that it would not have been obvious for those of ordinary skill in the art to substitute isodecyl-O-(PO)₁-(EO)₁₀-H for the nonionic EO-PO surfactant of Ahluwalia.

As such, Maeda et al., Holton, and Ahluwalia do not teach or suggest all of the elements of the presently claimed invention. Thus, Applicants respectfully submit that those of skill in the art would not have found the presently claimed invention to be obvious over the combination of Ahluwalia, Maeda et al. and Holton, especially as related to anionic surfactant (C), (D) or (E) of formula (5), (6) or (7), or n-tetradecyl-SO₃Na of the elected species and as to the use of isodecyl-O-(PO)₁-(EO)₁₀-H as a nonionic surfactant in a digestion assistant for the alkaline digestion of lignocellulosic material.

In view of the amendments and remarks above, Applicants respectfully submit that this application is in condition for allowance and request favorable action thereon.

In the event this paper is not considered to be timely filed, Applicants hereby petition for an appropriate extension of time. The fee for this extension may be charged to our Deposit Account No. 01-2300, referring to Attorney Docket No. 103176-00001. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 01-2300, referencing Attorney Docket No. 103176-00001.

Respectfully submitted,


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